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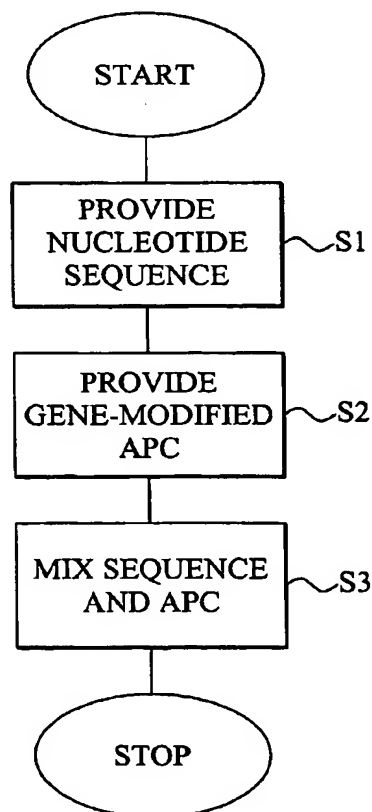
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(54) Title: NUCLEOTIDE AND CELLULAR VACCINE COMPOSITION



(57) Abstract: The present invention refers to a novel combination of nucleotide and cellular vaccine composition and pharmaceutical composition and use thereof for treating and/or preventing diseases, including infectious diseases, cancer, autoimmune diseases, allergy, diabetes and blood disorders. The vaccine composition comprises a nucleotide sequence encoding an antigenic molecule and gene-modified antigen-presenting cells (APCs), preferably provided as an intermixture. The APCs are modified to express immune modulating molecules. Immunization with the vaccine composition of present invention into a subject, induces the host immune system to respond and generate efficient immunity against either pre-existing disease or protect the host against the disease.

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